Monte Carlo Production

- **Current Status**
  - ➔ Running p11 Monte Carlo
  - ➔ Using MC Request System
  - ➔ Mostly successful
  - ➔ No longer requires someone to distribute jobs

- **Problems**
  - ➔ MC Request Details are all stored as strings
    - Means have to get exact string in request to store data
    - 2.0 != 2. This causes many problems
    - Need defaults
  - ➔ Couple of features in runjob need fixing
    - If floats set equal to zero value is set to default (needs fixing)
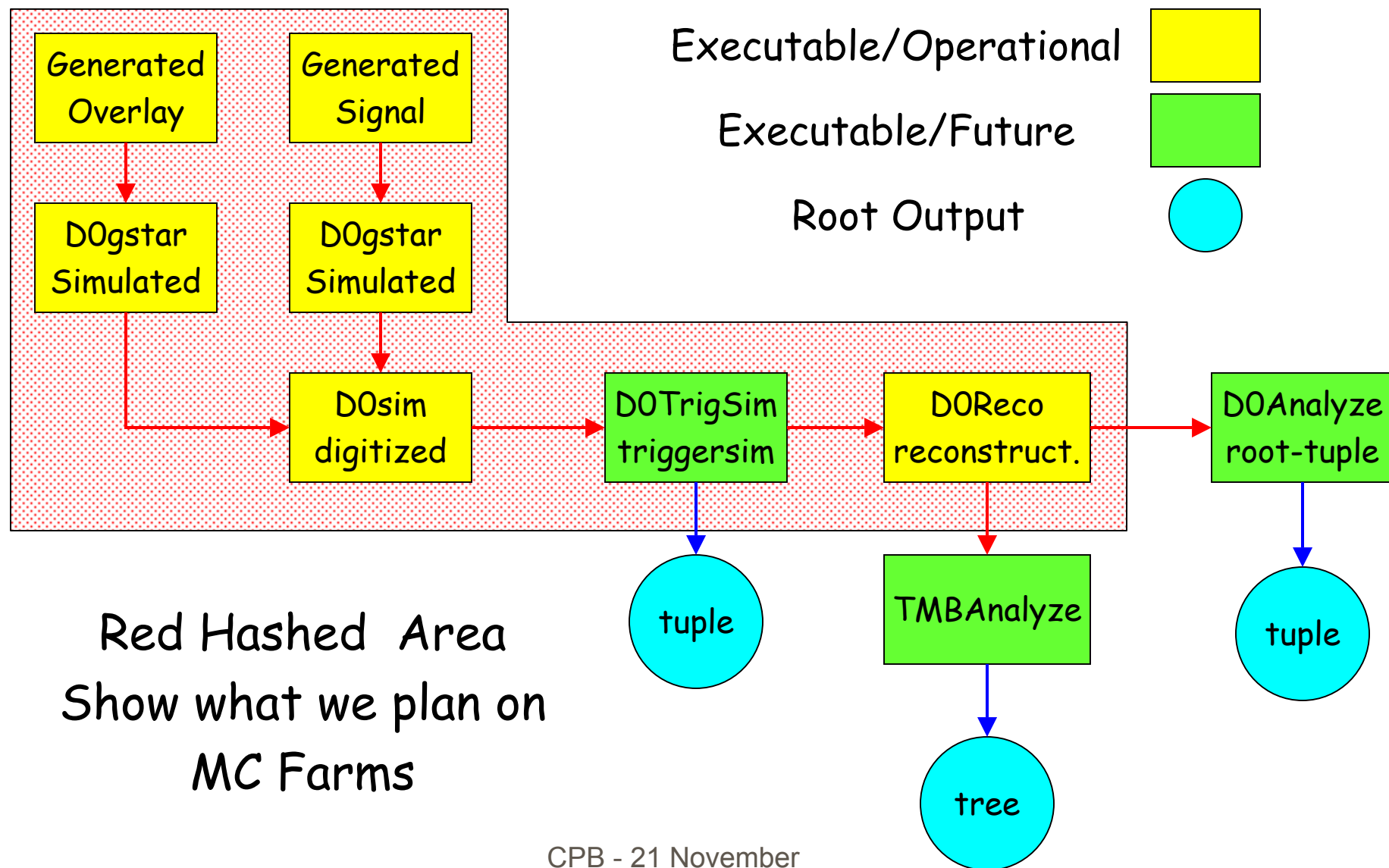 - ➔ Need to merge small files (thumbnail)

p13

- p13.03 should be first p13 release
  - ➔ reco certification sample currently being generated
  - ➔ First look, everything works
  - ➔ Need to test new version of runjob
- Plans
  - ➔ Will merge thumbnails manually into ~10k files (~250M) (use similar tools to FNAL farms)
  - ➔ Will store full d0reco output
  - ➔ No root-tuples or trees
- Trigsim
  - ➔ Not running yet.
  - ➔ Need trigger list!

mc_runjob MC Processing

Generated Overlay → D0gstar Simulated

Generated Signal → D0gstar Simulated → D0sim digitized → D0TrigSim triggersim → D0Reco reconstruct. → D0Analyze root-tuple

Executable/Operational
Executable/Future
Root Output

D0TrigSim triggersim → tuple

D0Reco reconstruct. → TMBAnalyze → tree

D0Analyze root-tuple → tuple

Red Hashed Area
Show what we plan on
MC Farms

CPB - 21 November

Short Term Plans

- **Runjob**
  - ➔ SAM Project as input to Runjob
  - ➔ Integration of by-group data-tiers for group generated information
  - ➔ Integration of sam store/declare as part of runjob
  - ➔ Pre-processor for setting up parallel jobs etc.
  - ➔ Set-up configuration for remote sites to ease upgrades
- **Metadata**
  - ➔ Need float and logical types integrated soon
  - ➔ Need facility for checking metadata using filename.
- **Requests**
  - ➔ Need Priority for Groups
  - ➔ Queue with dials for ORB to control
- **Zero-Bias**
  - ➔ Need to test overlaying with zero-bias
  - ➔ Require Plan

Long Term Plans

- **Runjob**
  - ➔ Automatic merging of file outputs
  - ➔ Storing temporary files in local SAM locations
  - ➔ Remove need to have list of rcp files for input

- **SAM-JIM**
  - ➔ use global sam-grid queue to run Monte Carlo
  - ➔ Remote Centres advertise ability to do MC
  - ➔ Submit each request as request-id and number of events to SAM-JIM
  - ➔ Runs as batch job at remote site and results stored in SAM
  - ➔ Remove need for remote farm operators to submit and monitor individual jobs

Questions

- PMCS
  - ➔ Do we want PMCS to be able to run as part of remote production?
  - ➔ Do we need a PMCS data-tier?
  - ➔ I think the answer to these questions is yes.